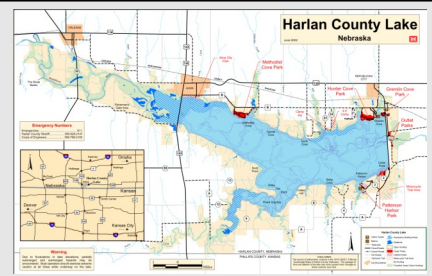


# Harlan Reservoir

## 2010 Angler Survey Summary

Nebraska Game and Parks Commission  
Brad Newcomb, District Manager



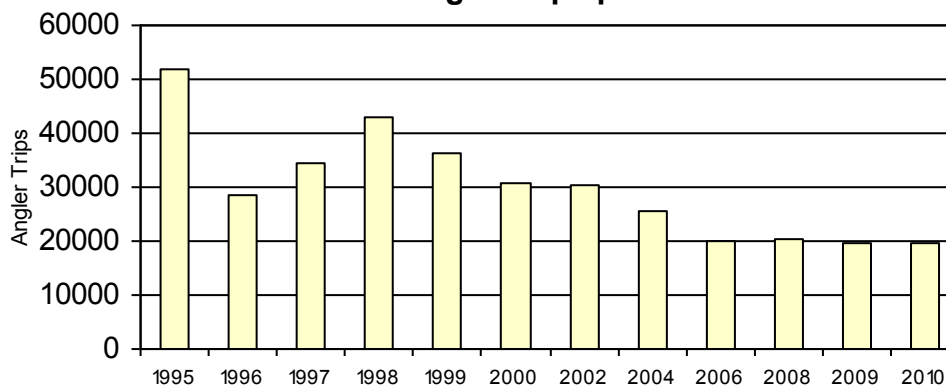
An angler survey was completed at Harlan Reservoir from April through October 2010. During this time period, angler counts and interviews were completed on 20 days per month, which included 14 weekdays and 6 weekend days. A total of 140 days were surveyed with 913 interviews. Angler surveys provide estimates of angling effort, catch and harvest, catch per hour, and sizes of fish caught. From 1990 to 2000, angler surveys were completed annually, but changed to an alternate year format from 2002 to 2008. Starting in 2009, a contract for annual angler surveys at Harlan is planned through 2013.

The following text and graphs provide summaries of this year's survey data with comparison to past years.

### Fishing Effort Summary

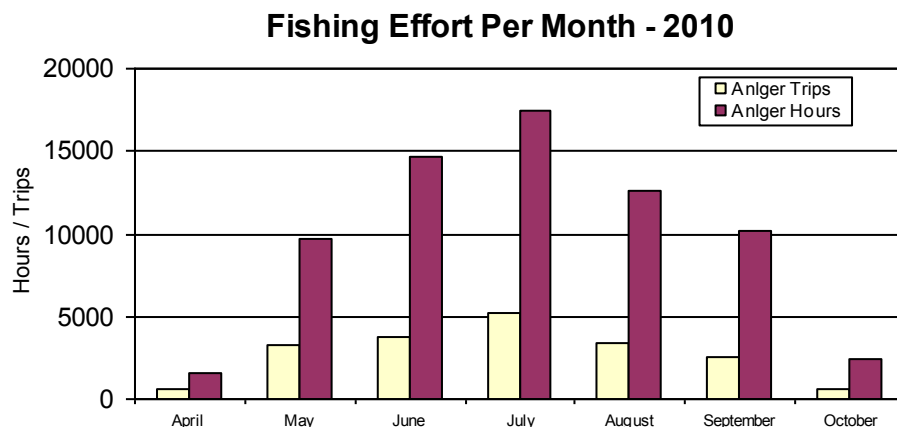
An estimated 19,491 angler trips were made to Harlan Reservoir during the seven month survey period in 2010, which was very similar to the previous three years. Extensive flooded vegetation continues to contribute to difficult fishing conditions and lower angler use. Anglers spent 67,787 hours fishing (5 hrs/acre), with the average trip lasting 3.5 hours. The following Nebraska counties contributed the most Harlan anglers: Harlan (23%), Adams (12%), Buffalo (9%), Lancaster (7%), Phelps (6%), and Hall (4%). Non-residents made up 5% of all anglers.

**Total Angler Trips per Year**



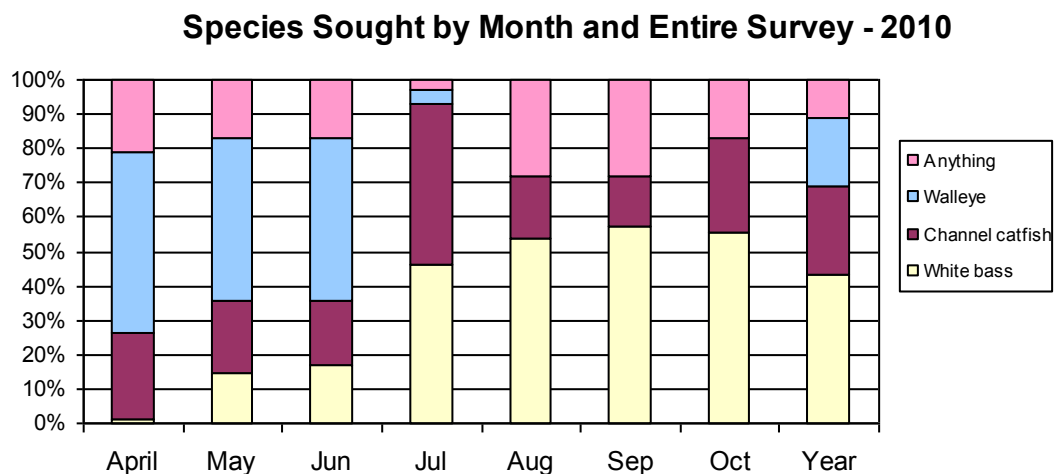
## Fishing Effort by Month

July had the highest angler use, and the months of May-June-July accounted for 63% of the fishing effort during the seven month survey period.



## Fish Species Sought by Anglers

Fish species sought by anglers varied by month, with many anglers seeking walleye early, and white bass later in the year. The percentage of anglers seeking channel catfish was more even throughout the year, indicative of more consistent success. Over the entire survey period, 43% of Harlan anglers sought white bass, 26% sought channel catfish, 20% sought walleye, and 11% fished for anything.



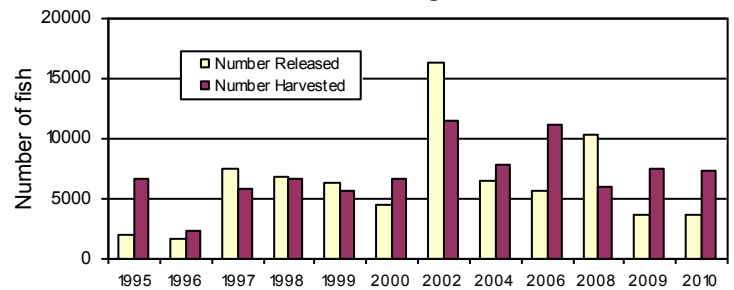
## Channel Catfish

**2010 Regulations:** *No size limit, 5 fish daily bag*

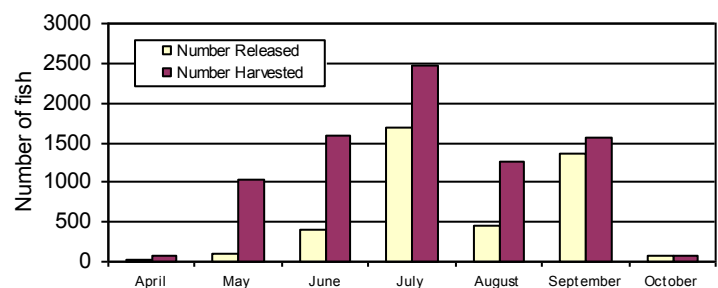
Harvest and release of channel catfish was similar to last year. A total of 10,949 fish were caught, with 7,327 harvested and 3,622 released. There were 630 harvested catfish measured during the survey, with an average length of 20 inches, and range of 9 to 34 inches. The total catch rate for anglers seeking channel catfish was 0.41 fish/hour, with a harvest rate of 0.30 fish/hour. Catfishing has been the highlight of the last two angling seasons, and the new catfish regulation that went into effect in 2009 (daily bag of 5) has not reduced pressure or catch.

Monthly catch of catfish peaked in July, with good catch from May through September. Harvest was much higher than release in May and June.

**Channel Catfish Caught Per Year**



**Channel Catfish Caught Per Month - 2010**

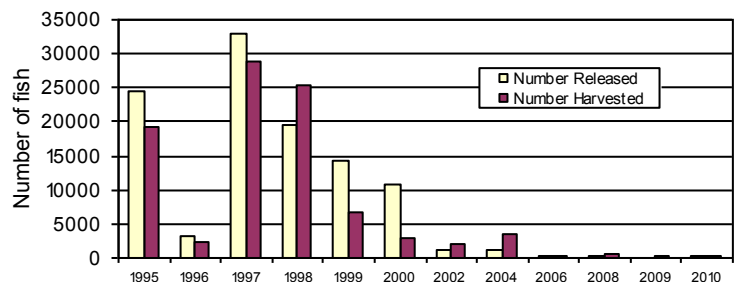


## Crappie

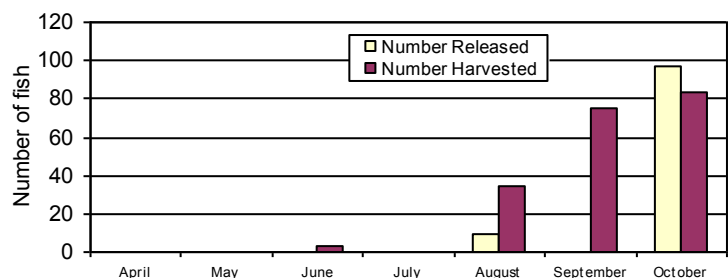
**2010 Regulations:** *No size limit, 30 panfish daily bag*

Crappie catch from 2002 through 2010 was very low compared to the late 1990's. Estimated total catch of crappie in 2010 was 506, with 164 harvested and 342 released. Crappie anglers caught 0.05 crappie per hour, and harvested 0.03 crappie per hour. There has been excellent crappie recruitment with high water levels from 2007-2010, and based on the 2010 fall netting survey, future crappie fishing should be very good.

**Crappie Caught Per Year**



**Crappie Caught Per Month - 2010**



Although the numbers are low, crappie catch peaked late in the year, with October the best month. Gremlin Cove and Patterson Harbor provided some good short-term crappie fishing late in the season.

## Walleye

**2010 Regulations:** *Daily bag limit of four may include one walleye from 15 through 18 inches and three over 18 inches or four over 18 inches, but no more than one over 22 inches in length allowed in the daily bag*

Walleye catch was very low again in 2010. Both harvest (699) and release (650) numbers were near long-term lows. Extensive flooded vegetation and high reservoir levels contributed to difficult fishing conditions. Catch per hour for anglers seeking walleye reflected the difficult fishing conditions, with a total catch rate of 0.07 walleye per hour and a harvest rate of 0.05 fish per hour. That equates to walleye anglers averaging 14 hours to catch a walleye, and 20 hours to harvest a walleye. An excellent 2010 year-class of walleye will contribute considerably to improved walleye recruitment, and with reduced flooded vegetation over time, walleye fishing success should improve in future years.



The numbers were low throughout the season, but June was the best month for walleye harvest. June-July-August contributed 57% of the walleye harvest, while May and July were the best months for walleye release.

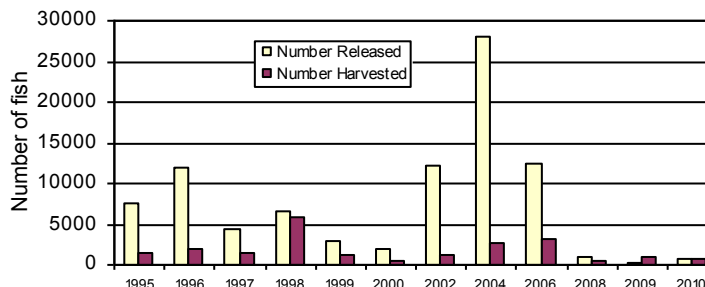


Harvested walleye ranged from 15 to 28 inches, with an average of 18.8 inches (73 measured).

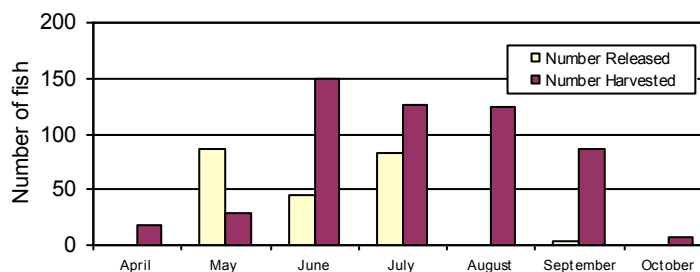
Compliance with the walleye size limit was very good, with no walleye under 15 inches encountered during the angler survey.

Walleye from 15-18 inches made up 47% of the harvest and 40% of released walleye.

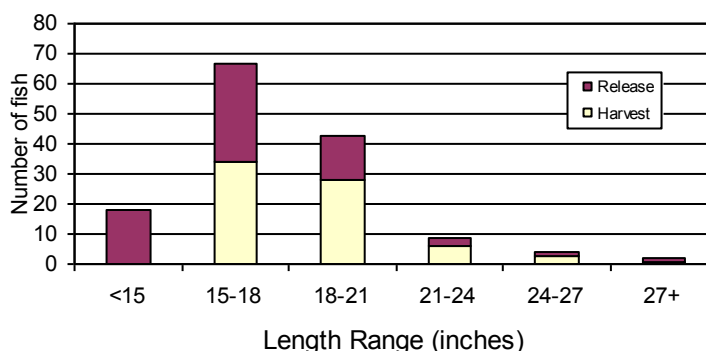
**Walleye Caught Per Year**



**Walleye Caught Per Month**



**Size of Walleyes Caught by Anglers - 2010**



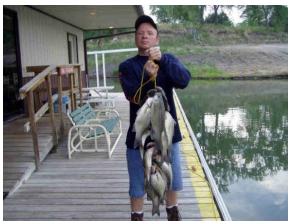
## White Bass

**2010 Regulations:** 15 fish daily bag, no more than one fish over 18 inches in daily bag

White bass anglers had low success again in 2010. Harvest (13,884) and release (4,255) were near the lowest recorded in the last 10 years. Catch rates for anglers seeking white bass were poor, with 0.43 fish caught per hour and 0.33 harvested per hour. NGPC survey work indicates improved white bass recruitment, and hopefully white bass fishing will rebound in future years.

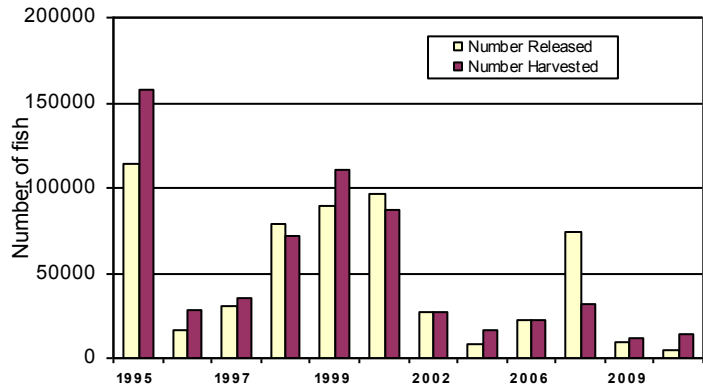


July and August were the best months for white bass harvest, while June had the highest number of released white bass.

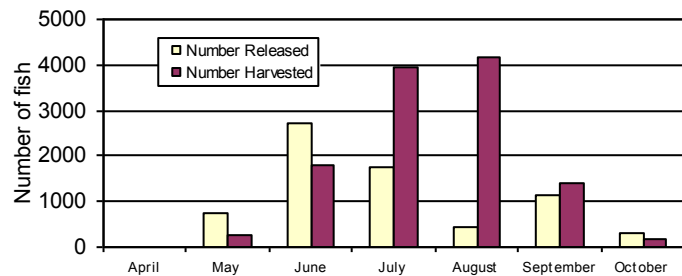


Harvested white bass ranged from 6 to 16 inches, with an average of 11.5 inches (1,145 measured). White bass from 10-12 inches made up 76% of the harvest in 2010. White bass over 12 inches made up 20% of the harvest.

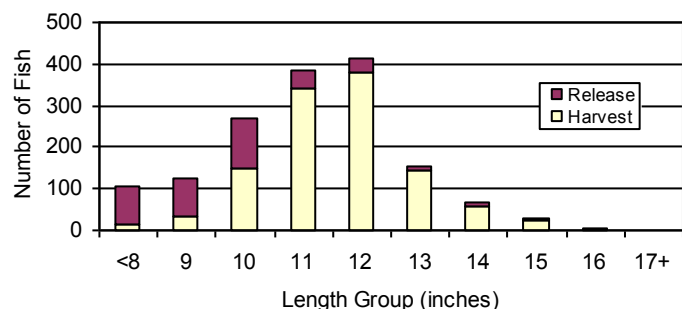
**White Bass Caught Per Year**



**White Bass Caught Per Month - 2010**



**Size of White Bass Caught by Anglers - 2010**



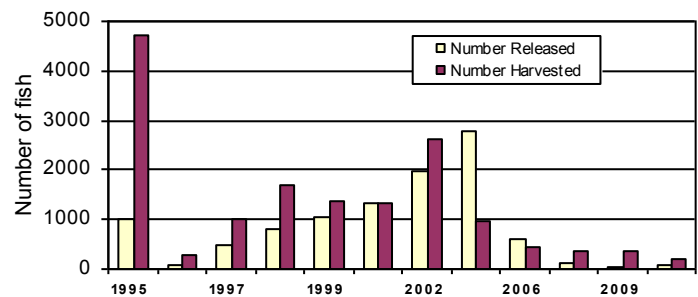
## Wipers

**2010 Regulations:** 15 fish daily bag, no more than one fish over 18 inches in daily bag

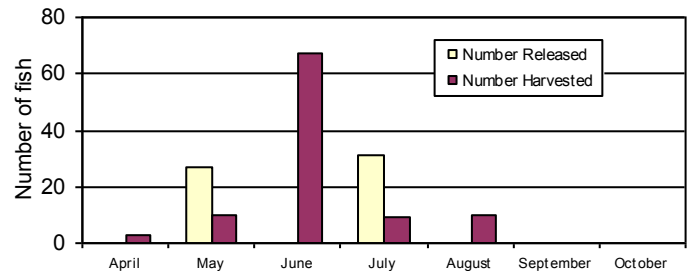
Anglers caught very few wipers again in 2010. Wiper catch has been low since 2006. The low wiper catch is the result of no stockings from 2000 through 2004. Recent wiper stockings in 2005 and 2008, and planned stocking for 2011, should improve future wiper fishing. In 2010, there was an estimate of 197 wipers harvested and 64 released. Harvested wipers ranged from 10 to 27 inches long, with an average of 18.7 inches (23 measured).

June was the best harvest month for wipers, while May and July contributed all of the released wipers.

**Wipers Caught Per Year**

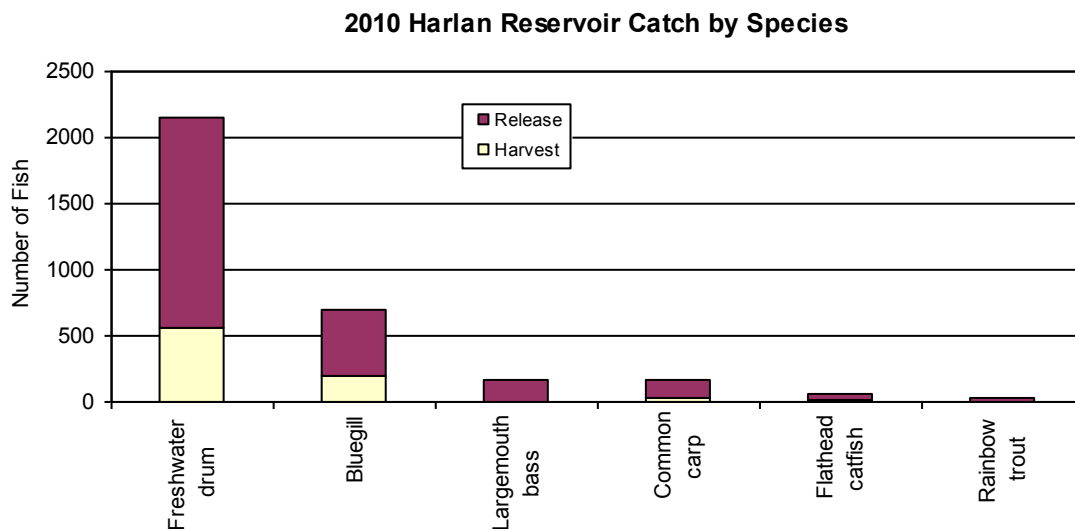


**Wipers Caught Per Month - 2010**



## Miscellaneous Species

Six other fish species were represented in the 2010 angler catch, with freshwater drum the most numerous. Bluegill and largemouth bass catch were higher than past surveys, likely a result of high water levels and improved shoreline habitat. A few rainbow trout have shown up the last two years, most likely fish that have moved downstream from stockings up in the watershed.



*For additional information about fisheries management at Harlan Reservoir, please contact the NGPC Kearney office at 308-865-5310 or by email at the addresses listed below.*

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